subjecting the examination area to ultrasonic energy of two different excitation frequencies, and imaging the examination area using a signal combination of both excitation frequencies.

20. An apparatus for ultrasonic harmonic imaging of biological tissue in an examination area comprising:

one or more ultrasonic energy generators generating an excitation frequency of from 0.3 MHZ to 22 MHZ applied to the examination area;

one or more transducers transmitting the ultrasonic energy to the examination area and detecting reflected and/or backscattered energy from the examination area; and

a processor evaluating from the reflected and/or backscattered ultrasonic energy from the examination area at least one signal frequency-shifted from the excitation frequency and generating an image of biological tissue in the examination area therefrom.

21. An apparatus for ultrasonic harmonic imaging of biological tissue in an examination area comprising:

one or more ultrasonic energy generators generating two different excitation frequencies both of from 0.3 MHZ to 22 MHZ applied to the examination area;

one or more transducers transmitting the ultrasonic energy at both frequencies to the examination area and detecting reflected and/or backscattered energy from the examination area; and

a processor means evaluating from the reflected and/or backscattered ultrasonic energy from the examination area a signal combination of the two excitation frequencies and generating an image of biological tissue in the examination area.

22. The apparatus of claim 20, wherein the generator(s) generate said excitation frequency with variable amplitude and period.

23. The apparatus of claim 21, wherein the generator(s) generate said excitation frequency with variable amplitude and period.

24. The process of claim 18, wherein the examination area is subjected to ultrasonic energy in a broad bandwidth.

25. The process of claim 18, wherein the examination area is subjected to the excitation frequencies in a broad bandwith.

26. The apparatus of claim 20, wherein the ultrasonic energy generator(s) generate ultrasonic energy in a broad bandwidth.

27. The apparatus of claim 21, wherein the ultrasonic energy generator(s) generate both excitation frequencies in a broad bandwidth.

28. The process of claim 18, wherein the ultrasonic contrast agent contains microbubbles or produces microbubbles upon exposure to ultrasonic energy.

29. The process according to claim 18, wherein the ultrasonic contrast agent is a solution, an emulsion or a suspension.

30. The process according to claim 29, wherein the contrast agent is a microbubble suspension having a concentration of from 10^{-3}% by weight to 30% by weight dry substance in the suspension.

31. The process of claim 18, wherein the frequency f_o is 1 MHZ to 11 MHZ and 1 to 5 cycles are generated.

32. The process of claim 18, wherein the reflected and backscattered ultrasonic signal is processed with a computer-controlled gate circuit, at least one time window is selected and the associated frequency spectrum being determined in analog or digital manner.

33. The process of claim 19, wherein the ultrasonic contrast agent contains microbubbles or produces microbubbles upon exposure to ultrasonic energy.

34. The process according to claim 19, wherein the ultrasonic contrast agent is a solution, an emulsion or a suspension.

35. The process according to claim 34, wherein the contrast agent is a microbubble suspension having a concentration of from 10^{3}% by weight to 30% by weight dry substance in the suspension.

36. The process of claim 19, wherein the reflected and/or backscattered signal is processed with computer-controlled gate circuit, at least one time window ~~being~~ is selected and the associated frequency spectrum ~~being~~ is determined in analog or digital manner.

37. A system for obtaining an image of biological tissue comprising biological tissue, and in operative association therewith,

one or more ultrasonic energy generators for generating an excitation frequency of from 0.3 MHZ to 22 MHZ applied to the examination area;

one or more transducers for transmitting the ultrasonic energy to the examination area and for detecting reflected and/or backscattered energy from the examination area; and

a processor evaluating from the reflected and/or backscattered ultrasonic energy from the examination area at least one signal frequency-shifted from the excitation frequency and generating an image of biological tissue in the examination area therefrom.

38. A system for obtaining an image of biological tissue comprising biological tissue, and in operative association therewith,

one or more ultrasonic energy generators for generating two different excitation frequencies both of from 0.3 MHZ to 22 MHZ applied to the examination area;

one or more transducers for transmitting the ultrasonic energy at both frequencies to the examination area and detecting reflected and/or backscattered energy from the examination area;